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**ENVIRONMENTAL INFORMATION** 

# 15.1 The ecological and energy transition

#### 15.1.1. Energy and emissions

The **steel sector** generates a significant impact on climate, contributing about **8%** <sup>5</sup> **of global emissions**. It is considered a "**hard-to-abate**" sector, i.e. a sector where reducing greenhouse gas emissions is challenging due to complex production processes that require large amounts of high-temperature energy. Finally, the steel sector requires large long-term investments, which implies that many of the emissions generated today are defined as "**locked-in**",

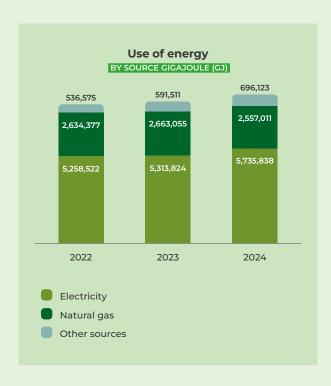
making them difficult to avoid in the short term due to existing infrastructure that takes time to upgrade and improve.

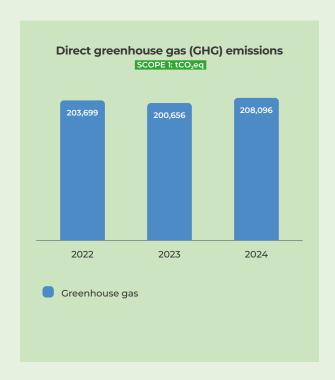
Feralpi Group's production process, based on **electric arc furnace (EAF)** and **ferrous scrap** as primary material, has an approximately **three times less impact** than the more common full-cycle process with blast furnace and iron ore, which accounts for the bulk of steel production worldwide. Feralpi Group is aware of its impact on the climate, which

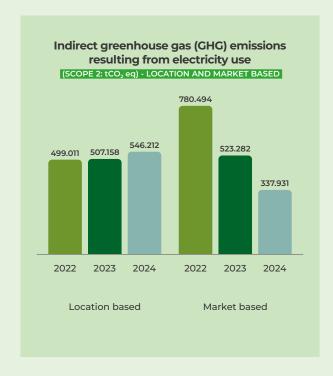
occurs at different stages of the value chain. Greenhouse gas emissions, both **direct (Scope 1)** and from **energy purchases (Scope 2)** of the Group derive mainly from the steel melting and rolling processes.

For Scope 1 emissions, the main source is **methane** gas used in the billet heating furnaces entering the Group's own rolling mills, while Scope 2 emissions are generated by the **electricity** required for the scrap melting process with the electric arc furnace and, to a lesser extent, other production processes.

<sup>&</sup>lt;sup>5</sup> International Energy Agency (IEA) - https://www.iea.org/energy-system/industry/steel







In 2024, energy consumption increased by 4.91% compared to 2023, in line with the change in the total production of the Group, while they increased by 6.64% compared to 2022. (See table above).

With regard to greenhouse gas emissions, direct emissions (Scope 1) show an increase of 3.71% compared to 2023, an increase justified by the higher production of the year 2024 (+6.6% on 2023).

In fact, upon examining the specific emissions (Scope I emissions relative to the total tonnes of hot-rolled steel), a 2.3% decrease was identified in comparison to 2023.

Regarding indirect emissions from energy purchase (Scope 2), calculated according to the Location-based methodology, they show an increase of 7.70% from 507,158 tCO<sub>2</sub>eq in 2023 to 546,212 tCO<sub>2</sub>eq in 2024. Regarding the calculation according to the Market-based methodology, emissions decreased by 35.42% from 523,282 tCO<sub>2</sub>eq in 2023 to 337,931 tCO<sub>2</sub>eq in 2024.

This reduction was possible thanks to the acquisition of certified renewable electricity through the purchase of Guarantee of Origin (GO) certificates. This form of energy is composed of an assortment of renewable sources, including solar, wind and hydroelectric.

As part of the decarbonisation process, Feralpi Group has further reinforced the collection and analysis of data related to Scope 3 emissions, expanding the boundary and the level of detail of the information considered. To this end, a **new emissions inventory** was compiled, which is more comprehensive and timely than that published in previous sustainability reports. Its processing occurred in accordance with the **GHG Protocol Corporate Standard**, the initiative dedicated to the global standardisation of the calculation and reporting of greenhouse gas emissions for businesses, with the objective of improving the robustness of the Group's commitments to transitioning to a low-carbon economy.

SCOPE 3 CATEGORIES tCO <sub>2</sub> eq	2024	2023	2022
Purchased goods and services	658,857	502,346	594,385
Capital goods	117,342	86,486	57,621
Activities related to fuels and energy, not included in Scope 1 or Scope 2	96,213	89,284	169,059
Upstream and downstream transportation and distribution	197,044	179,272	145,368
Waste produced in operations	26,587	23,097	23,147
Transformation of goods sold	8,498	22,709	18,514
End-of-life treatment of products sold	137,854	258,329	222,452
TOTAL	1,242,395	1,161,523	1,230,545

Further information on how the above-mentioned Scope 3 categories contribute to determining SBTi targets is available in the *Appendix [Section "Environmental Sustainability Indicators"*].

#### 15.1.1.1. The climate transition plan

Reducing greenhouse gas emissions in the sectors in which the Group operates, from construction steels to special steels, is essential for mitigating climate change, as its impacts are increasingly frequent and intense globally. To tackle this significant challenge and to align with evolving European regulations and international agreements, Feralpi Group has developed a climate transition plan, a framework that specifies the strategies for reducing Scope 1 and Scope 2 emissions and details the practices, processes, and investments aimed at achieving this objective.

The Group is concurrently committed to collaborating with other players in its supply chains to reduce indirect emissions from the supply chain and transport (Scope 3). Feralpi Group has divided the climate transition plan into two time horizons, short and long term, with the aim of helping to limit the global temperature increase to within 1.5°C:

#### Short-term objectives (2030):

- Reduction of specific CO<sub>2</sub> emissions (Scope 1, 2 and 3 core boundary) in relation to the total production of hot rolled products by 50% compared to the baseline year 2022.
- Reduction of absolute CO<sub>2</sub> emissions (Scope 3 non-core boundary) by 25% compared to the baseline year 2022.

#### Long-term objectives (2050):

Achieving the Net-Zero target through a decarbonisation strategy based on long-term objectives and the neutralisation of residual emissions. The possibility of reaching this extremely challenging goal will depend on the Group's ability to forge strong partnerships with suppliers to intervene in the supply chain and on the support of government policies and subsidies for the development of low- or zero-carbon impact technologies.

For the definition of these objectives, linked to the Group's overall sustainability plan and included in the ESG Scorecard [Section 14.2.], the guidelines relating to the steel sector published in July 2023 by the Science-based Targets Initiative (SBTi)<sup>6</sup>, an organisation that independently evaluates and approves the company's greenhouse gas objectives.

ensuring their alignment with the objectives of the Paris Agreement, were followed. In July 2024, Feralpi Group's short-term targets received approval from the Science-Based Targets initiative (SBTi), positioning the Group as one of the first European steel companies to have its climate change mitigation efforts acknowledged by this prestigious organisation.

To achieve the established objectives, Feralpi Group has collaborated with expert strategic partners to identify, assess, and prioritise the **technological and systemic levers** available for reducing greenhouse gas emissions. The detail of the solutions identified is available in the Report on Operations [Section 4.1.].

The Transition Plan of Feralpi Group is also based on collaborations with other stakeholders, both industrial and governmental, and on the adoption of new technologies with low or zero greenhouse gas emissions.

In Italy, the Group is involved in the **Green Metals** project, which aims to decarbonise the Brescia steel industry through the production of biomethane. Meanwhile, in Germany, FERALPI STAHL has joined the **Meissen Energy and Hydrogen Alliance (EWI)**, which seeks to promote the use of hydrogen as a methane alternative.

In addition, the Group is engaged in numerous **Research and Development** activities to contribute to the development of new technologies capable of further mitigating its environmental impacts **[Section 5.]**.

Within Feralpi Group, there is a dedicated company, Feralpi Power On, for the development and management of projects related to generating energy from renewable sources, through photovoltaic installations and potentially wind power. Further information about this is available in the Report on Operations [Section 4.2.].

<sup>&</sup>lt;sup>6</sup> www.sciencebasedtargets.org

PHOTOVOLTAIC INITIATIVES	APPROVED AND IN CONCLUSION	COMPLETION OF WORKS	POWER (MW)	TYPE	NUMBER OF MODULES
Feralpi Siderurgica	Lonato del Garda	April 2024	3.47	Roof-mounted	8,399
Acciaierie di Calvisano	Calvisano	July 2024	3.90	Roof-mounted + ground-based	7,127
Presider	Nave	May 2023	1.07	Roof-mounted	2,527
Nuova Defim	Anzano del Parco	August 2023	0.45	Roof-mounted	1,124

## Physical and transitional climate risks

In addressing the climate transition, Feralpi Group is committed to assessing and mitigating the risks associated with the path described above. An indepth description of these risks is presented in the Report on Operations [Section 10].

# 15.1.1.2. Measures for improving energy efficiency and greenhouse gas emissions

Feralpi Group annually adopts new energy efficiency measures, reducing the use of fossil fuels and increasing energy from renewable sources in order to reduce greenhouse gas emissions resulting from its production and transport processes.

COMPANY	ACTIONS AND MEASURES FOR ENERGY EFFICIENCY AND GHG EMISSIONS
Feralpi Siderurgica	In 2024, the start-up of the new roller way was completed, which, thanks to the efficient transport of billets to Rolling Mill 2, allowed a reduction in the energy required to heat them to the required rolling temperature.  Operations to improve the cleanliness of the scrap continue constantly in order to improve the quality of the input material and consequently make the process even more efficient in terms of energy and material separation.
Acciaierie di Calvisano	In 2024, two ground-mounted photovoltaic parks were built on owned land for self-consumption, which will be connected to the grid during 2025.  In addition, a new ladle heating system with regenerative burners was installed, reducing the specific consumption of methane gas. At the same time, preparatory work started on the installation of a second heating station with the same characteristics, which will be installed in 2025.  Also in 2024, the compressor overhaul campaign, with a view to reducing energy consumption, was concluded with the replacement of the last compressor.
Presider	In 2024, the 1 MW photovoltaic plant on the roof of the Nave factory was connected to the grid and started up. A new warehouse has been completed at the Pomezia site, and evaluations are underway for the installation of a photovoltaic system of approximately 400 kW on its roof, in addition to the existing 347 kW system. In 2025, work is scheduled to start on the roof of the Borgaro Torinese plant for the construction of a 2MW photovoltaic plant. At the same time, work will also take place to re-roof the plant to accommodate the new system.
Arlenico	In 2024, the internal heat recovery system of the rolling mill's reheating furnace was replaced. The new recuperator, which came into operation in 2025, will optimise the furnace cycles by improving energy consumption and reducing heat loss to the environment.
Nuova Defim Orsogril	At the Anzano al Parco site, activities for the installation of the photovoltaic system on the roof of the plant were completed in January 2024. In addition, efficiency work continued on the use of hydraulic power unit oils.  In 2025, possible actions to improve the efficiency of the compressed air distribution network at the Anzano al Parco and Alzate Brianza sites will be evaluated.
ESF Elbe-Stahlwerke Feralpi GmbH	In 2024, work continued on the new Rolling Mill B, the first K-Spooler plant in Germany capable of producing 8-tonne coils, whose roller with induction furnaces was created. The plant will be completed and commissioned in early 2025. The new scrap sorting and preparation plant went into operation in February 2024, enabling both the efficiency of steel production through EAF and the reduction of waste production. The next steps in the process are currently being defined. Work continued on the new power plant, which will provide the necessary energy for the new production layout and will be completed in the first half of 2025. For its construction, Siemens' blue GIS (Gas Insulated Switchgear) technology was used, which involves replacing fluorinated gases with a pure air-based insulator that can be directly released into the atmosphere. Activities continued related to the logistics of the new layout of the site, with the construction of new internal road and rail links with the aim of optimising the flow of materials and improving safety at work. The project will continue in the coming years. Testing activities concerning the possible use of hydrogen in its production processes have been postponed due to the dynamics of the relevant market. In 2024, the German government took the decision to connect the Riesa plant to Germany's hydrogen backbone network; the connection should be completed by the end of 2027.

#### 15.1.1.3. Emissions into the atmosphere

The production of steel inherently involves a risk of pollution due to process emissions released into the air and water, which can adversely affect the environment and local communities if not properly managed.

Feralpi Group's production activities are regulated by air emission regulations at the local, national, and European levels. Aware of the environmental impact of its operations, the Group is committed to managing these emissions correctly, in line with European pollution reduction objectives<sup>7</sup>. This commitment translates into strict compliance with current regulations and constant monitoring of the emissions generated at all Group plants.

Specifically, the chimneys at the steelworks are equipped with filtration and dust reduction systems capable of alerting operators to any anomalies, enabling them to initiate the required checks and maintenance as per system procedures.

In 2024, at Acciaierie di Calvisano, a new suction hood for the electric furnace was installed, leading to improved efficiency in capturing waste fumes and separating the dusty fraction, thus contributing to enhanced plant performance in terms of emissions.

#### 15.1.1.4. Sustainable mobility

With a view to reducing atmospheric emissions, Feralpi Group believes it is essential to pursue actions aimed at developing increasingly sustainable mobility. In recent years, the Group has focused on **gradually** increasing the use of rail and intermodal transport to manage the movement of products to and from its production sites, in order to reduce road travel. The aim is to provide the key facilities - Lonato del Garda, Calvisano, Lecco, and Riesa - with an efficient railway connection, gradually increasing rail freight volumes to decrease greenhouse gas emissions and lessen the traffic impact on the communities where the sites operate in terms of pollution and road safety. However, in 2024, uncertainties persisted in both the infrastructural and social spheres, largely because of numerous rail strikes and the significant increase in train transport costs in Germany, making rail transport more challenging. The Group is also investigating the contribution that alternative fuels, such as e-fuels and biofuels, may have on the indirect emissions associated with the Group's inbound and outbound transport.

At the Lonato del Garda, Calvisano and Riesa sites, recharging **stations for electric vehicles** are available and, for Presider, related installation work is in progress at the Borgaro Torinese, Pomezia and Nave sites.

For Presider, at the Borgaro Torinese plant, the Home-to-Work Travel Plan (PSCL) is active, led by a Mobility Manager, in accordance with Interministerial Decree no. 179 of 12 May 2021, to reduce the environmental impact of private vehicular traffic in urban areas through the promotion of initiatives for the reorganisation of mobility demand.

In 2024, despite not being subject to the decree, a Mobility Manager was appointed for the Feralpi Siderurgica site in Arlenico, and the associated PSCL was drafted, in addition to the external Mobility Manager already present.



With the action plan "Towards zero pollution for air, water and soil", the European Union has set itself the ambitious goal of reducing pollution to sustainable levels for the planet by 2050. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0400

For **Feralpi Logistik GmbH**, the only company in the Group that deals with logistics, sustainable mobility is a priority. All vehicles in the fleet meet EURO 6 emission standards as of 2018, and every new purchase must meet the more stringent emission standards with the aim of reducing diesel consumption by 8% by 2030.

## 15.1.2. Management of water resource

Water management is essential for the steel industry, especially for plant cooling. Feralpi Group implements stringent monitoring and reporting standards for the responsible use of water resources, reducing withdrawal and consumption and promoting reuse in industrial processes. In Italy, the treatment and discharge of water are guaranteed according to Legislative Decree 152/06, thanks to dedicated systems and controls by accredited bodies. In Germany, it operates with specific permits for the discharge into the public wastewater network.

The withdrawal at Feralpi Siderurgica and Acciaierie di Calvisano is taken from the water table by means of wells, while at the plant of ESF Elbe-Stahlwerke Feralpi GmbH it is taken from the municipal water network, in addition to the use of wells to supply small quantities for fire-fighting purposes. The plant of Arlenico draws water from the River Adda and constantly monitors the wastewater, recording and storing the data. A third party analyses water samples on a monthly basis for compliance with Legislative Decree no. 152/06. A de-oiling system ensures that rainwater is cleaned of polluting hydrocarbons.

At the Lonato del Garda site, the new sludge treatment facility at rolling mill 1 will not only reduce the volume of solid waste needing recovery but also enhance internal water recycling and, consequently, decrease reliance on the aquifer.

At the Riesa site, construction of a cistern began in 2024 to capture rainwater from the roofs of warehouses built for the new rolling mill B. This facility, with a capacity of 350 m³, will enable the recovery and reintroduction of rainwater in the cooling and process circuits, allowing savings of about 6,000 m³ of potable water from the public network each year. The new cistern is scheduled to come into operation in 2025.

In 2024, the volume of water withdrawn and discharged from sites with hot works was 3,131.75 ML (3,131,750 m³) and 480.09 ML (480,090 m³). The 2023 data indicate a 72% reduction in the discharged volume, attributed to the new direct cooling water treatment circuit that started operating at the Arlenico site in January 2024.

## **Hydrological context**

Feralpi Group has assessed the risk of water stress in its facilities that use water for production purposes (Feralpi Siderurgica, Acciaierie di Calvisano, Arlenico, ESF Elbe-Stahlwerke Feralpi GmbH).

The analysis was based on the **Aqueduct Water Risk Atlas** of the **World Resources** Institute and
on **GCM-RCM climate models**, considering current
data and projections to 2050. The risk was assessed
on the basis of water stress, i.e. the ratio between
human demand and water availability, without considering the specific business activities.

#### Soil and groundwater protection

Feralpi Group purifies the water from the plants before discharge into surface water bodies (Lonato del Garda, Calvisano) or sewers (Riesa, Lecco) and adopts emergency and monitoring procedures. Regular maintenance is carried out on pipelines and seals, and emergency kits are available at the storage sites of hazardous substances. Potentially polluting materials are collected and treated for recycling or disposal. Furthermore, the Group is engaged in the research of eco-friendly lubricants to replace petroleum-based ones with biodegradable alternatives. Substance management follows strict safety and environmental procedures, with regular drills in ISO 14001-certified plants.

SITE	WATER BASIN	WATER STRESS RISK (CURRENT - 2024)	WATER STRESS RISK TO 2050
Feralpi Siderurgica Lonato del Garda, Brescia	Oglio (Po)	•	•
Acciaierie di Calvisano Calvisano	Oglio (Po)	•	•
Caleotto Arlenico	Adda - Lake Como (Po)	•	•
Feralpi Stahl Riesa	Elba	•	•
		● High ● Medi	um-High • Low-Medium • Low

## 15.1.3. Biodiversity

Aware of the importance of biodiversity and ecosystems for the well-being of present and future society, as well as their rapid decline which threatens both nature and people, Feralpi Group has initiated a process to assess the impacts and risks to biodiversity and ecosystems in the areas in which it operates. Through climate change mitigation and adaptation actions, the Group is committed to actively contributing to the conservation of biodiversity by addressing the main causes of its loss.

Thanks to its international presence, the company aims to promote initiatives not only within its own value chain but also beyond, encouraging a widespread and shared commitment.

In line with the Taxonomy Regulation [Section 15.3], the Group has examined the position of its sites concerning protected areas. The analysis revealed® that none of the Group's sites fall within protected natural areas. However, the sites at Arlenico (Lecco), FERALPI STAHL (Riesa), and Feralpi-Hungária (Budapest) are located less than one kilometre from the perimeter of such areas. The complete information can be found in the Appendix [Section "Environmental Sustainability Indicators"].

In 2024, a working group was established at the Group level dedicated to this topic, which in the coming years will delve into the analyses and assess the opportunity for potential further improvements, in order to reduce the impact of the Group's activities on biodiversity.

The working group, which includes representatives from all Feralpi Group companies, aims to craft a unified strategy to address the issue and ensure consistent action across the board: therefore, by 2025, it plans to develop guidelines to guide the actions of the various companies within the Group.

In addition, biomonitoring activities through pollinating insects continue at the Lonato del Garda site: in 2024, the number of hives has doubled, increasing from four to eight.

The objectives of reducing the impact of the Group's activities on biodiversity can be achieved through two main enabling factors:

- Strategic collaborations with customers, suppliers, universities, institutions and research organisations, to identify new opportunities, develop innovative methodologies, and promote useful tools within the sector.
- Active involvement of employees and communities through training, communication, and awareness-raising on sustainable behaviours, as well as local development initiatives with a focus on climate adaptation.

# 15.1.4. Circularity and zero waste: material and energy management and enhancement

Feralpi Group organises its production processes to minimise production waste, reduce landfill contributions, and decrease the use of raw materials, with an emphasis on substituting them with recycled materials. The Group's steel production, based on the recycling of ferrous scrap, is intrinsically circular, preventing waste dispersion and limiting the consumption of additional natural resources.

Scrap, coming from different sources, can be supplied as waste or non-waste according to **EU Regulation 333/2011 "End of Waste"** and reintegrated into the production cycle. In addition to scrap, additives such as lime, ferro-alloys, oxygen and inert gases and reducing agents such as polymers are used. Some materials, like scrap and polymers, are fully reclaimed from other supply chains, whereas others, such as lime and refractories, are recycled or recovered internally in smaller proportions.

The steel produced by Feralpi Group consists of 98.6% recycled, recovered, or by-product material. The calculation is also made for the aggregates produced by the Group, which have the following values:

<sup>&</sup>lt;sup>8</sup> To carry out the study, the "European protected sites" database of the European Environmental Agency was used, which provides a comprehensive overview of protected sites in Europe. The database is available at the following web address https://www.eea.europa.eu/data-and-maps/explore-interactive-maps/european-protected-areas-1.

<sup>&</sup>lt;sup>9</sup> The figure refers to the minimum value of recycled, recovered, or by-product content among the values of the Group's three steelworks sites: Feralpi Siderurgica in Lonato del Garda (≥ 98.9%); Acciaierie di Calvisano (special steels ≥ 98.6%; construction steels ≥ 98.9%); ESF Elbe Stahlwerke Feralpi GmbH (≥ 98.7%).

≥ 96.6%



**GREEN STONE (BLACK SLAG)** 

≥ 100%



**GREEN LIME (WHITE SLAG)** 

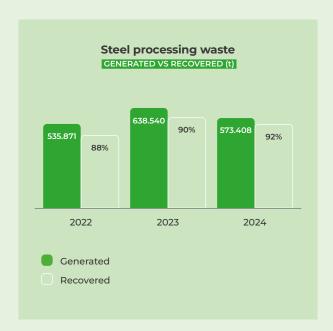
≥ 100%



**GREEN IRON (SCALE)** 

Total recycled, recovered, by-product content

These figures have been subjected to validation, by a third party, with positive results produced by the checks on the percentage content of recycled material according to the UNI EN ISO 14021 and UNI/PdR 88:2020 standards.



#### 15.1.4.1. Measures to improve circularity

The process of steel production is continually advancing due to the adoption of increasingly sophisticated solutions that optimise resource utilisation and reduce the environmental impact of production



#### Feralpi Siderurgica

In 2024, the **new sludge treatment plant at Rolling Mill 1** went into operation, which allows sludge to be obtained with less moisture, thus favouring the recovery and saving of water and reducing the amount of solid residues to be sent for recovery. Refinement activities of the plant, which will be fully operational in 2025, are ongoing.

In line with the Group's strategy to reduce the use of virgin raw materials, the use of manufactured products containing artificial aggregates in the plant and in resurfacing operations continues. Investments continue targeted at the continuous streamlining of scrap processing in order to boost the efficiency of the electric furnace.

In September 2024, the Lombardy Regional Council approved the guidelines for the management of white waste from secondary metallurgy, the result of the work of the related working group within the Observatory for Climate, Circular Economy and Ecological Transition, which saw the involvement of various stakeholders including the Feralpi Group.

processes. An essential aspect of Feralpi Group's strategy is the repurposing of waste materials, not only from its own productions but also from other supply chains, thereby promoting a circular approach that values residues as new resources.



#### Acciaierie di Calvisano

During 2024, the silo for the furnace-blowing of technopolymers derived from the processing of plastic waste came into operation, almost completely replacing coal for slag swelling.



#### Arlenico

Work continued on the district heating project: construction of the plant was completed in 2024 and it is expected to receive the necessary permits for start-up in 2025. Also in 2025, the installation of an external heat recovery boiler for the district heating system is planned for early in the year.

In addition, the replacement of the internal heat recovery system of the rolling mill's reheating furnace will optimise furnace cycles by improving energy consumption and reducing heat loss to the environment.



#### ESF Elbe-Stahlwerke Feralpi GmbH

Work continued on the **reuse of white slag**, which, thanks to the optimisation of the internal treatment process (screening, crushing, multi-stage magnetic separation), is now completely redirected to the concrete industry. Tests to replace hard coal with bio-coal also continue.

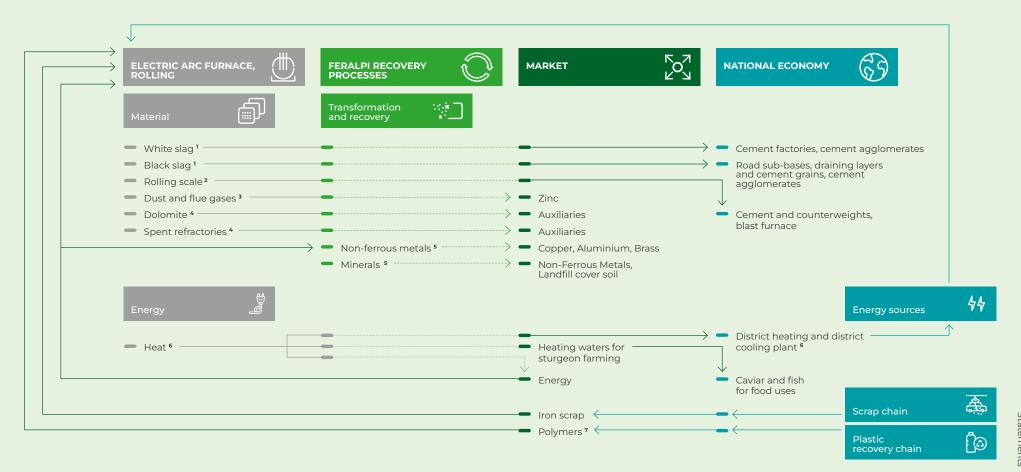
A project to recover about 3MW of waste heat from the cooling tower of the Riesa plant is being evaluated.

## Circular processes in Feralpi Group

Feralpi Group organises processes and facilities to **minimise production residues, landfilling and raw material handling,** investing in its replacement and circularity.



The steel produced by Feralpi is **98.6%** recycled material.



- <sup>1</sup> BLACK AND WHITE SLAG: Feralpi is conducting further studies to develop processes for the reuse of white slag in building limes, plastics and within production processes.
- <sup>2</sup> ROLLING SCALE: La scaglia di laminazione viene avviata: Rolling scale is recovered for external use. *Green iron* is the by-product obtained from the rolling scale that is sold to plants for the production of ballasts and concrete.
- 3 DUST AND FLUE GASES: The metal zinc contained in the dust resulting from flue gas removal in the melting process is mostly recovered at external plants in replacement of natural minerals. The dust produced by the ferro-alloy plant are fed directly into the production cycle, the amount of which equals that of the materials from which dust originates.
- 4 DOLOMITE AND SPENT REFRACTORIES: I refrattari esausti provenienti da demo-

I retrattari esausti provenienti da demospent refractory materials coming from the ladle are returned to the production cycle, as partial raw material substitutes. The raw material to be replaced is calcic lime and dolomite lime ("CaO cubes" and "40% CaO") to be used as a slagging agent in the EAF (electric-arc furnace). Their reuse in the furnace does not entail any negative impact on the environment or human health. <sup>5</sup> NON-FERROUS METALS AND MINERALS:

The residual fraction produced by the scrap selection plant is sent to external plants for the recovery through mechanical sorting of non-ferrous metals (such as aluminium, brass and copper).

- <sup>6</sup> **HEAT:** Heat is recovered from the cooling water systems of the Feralpi Siderurgica and the Riesa steel mills, preventing it from being released into the atmosphere.
- **POLYMERS:** The polymers sourced only from plastic packaging from separate waste collection are subjected to sophisticated sorting and classification processes at modern, qualified industrial plants and then to technological treatment for recycling. Such processes transform treated plastic materials into new "circular raw materials" that comply with regulations and quality standards, becoming important resources for various industrial applications.

#### ENHANCEMENT OF PRODUCTION RESIDUES WITHIN THE PRODUCTION CYCLE OR EXTERNALLY

Recovery and reuse of spent refractories in the production cycle in the place of raw materials	Spent refractories from ladle demolition are fed back into the production cycle to partially replace lime and dolomitic lime ("CaO lump' and 'CaO 40%"), the use of which has no negative impact on the environment or human health.
Recovery of dust and fumes to reduce the demand for mineral zinc	Fume abatement dust from the smelting process is largely treated at external plants to recover zinc metal, while that from the ferroalloy plant is reintroduced into the production cycle.
Recovery of mill scale, to replace iron ore in the construction supply chain	Rolling scale is recovered for external use. <i>Green iron</i> is the by-product obtained from the rolling scale that is sold to plants for the production of ballasts and concrete.
Recovery of non-ferrous metals from scrap sorting	The residual fraction produced by the scrap selection plant is sent to external plants for the recovery through mechanical sorting of non-ferrous metals such as aluminium, brass and copper.
Sludge recovery	The Feralpi Siderurgica's Lonato del Garda site has a new sludge filtration plant, which allows the production of a residue with lower moisture content and therefore more suitable for recovery in construction.
Slag recovery to replace materials of natural origin in the construction industry	The recovery, processing and marketing of black and white slag is outsourced. In Lonato del Garda, black slag is processed into ' <i>Greenstone</i> ', a CE 2+ marked product with Environmental Product Declaration EPD, used in construction to replace materials of natural origin. Also at the Calvisano plant, the black slag is recovered for the production of CE 2+ certified products. The utilisation of the white slag residue allowed it to be recovered in the cement production process.
Heat recovery for energy generation	The Lonato del Garda and Riesa plants recover heat from cooling water and the melting furnace, respectively. Feralpi Siderurgica uses it to heat indoor buildings and, in cooperation with the local administration, also public and private facilities. The plant in ESF Elbe-Stahlwerke Feralpi GmbH produces up to 30 t/h of steam, which is supplied to Goodyear Dunlop Tires via the municipal company SWR and partly used to generate electricity. Waste heat from the compressor stations is used to heat and supply hot water to the technical administration offices of Riesa. At the Arlenico site, a district heating project is underway that includes a plant to recover heat from the thermal waste from the rolling mill, flanked by a second hub in Valmadrera, where heat from waste-to-energy will be reused instead of being dispersed.

# 15.2 The environmental sustainability of Feralpi Group products

Feralpi Group's industrial strategy integrates a responsible approach to social and environmental issues, with the aim of providing increasingly comprehensive, integrated, and sustainable steel solutions.

As one of the five key pillars of corporate strategy, sustainability is an essential tool for generating shared value among all stakeholders and, at the same time, ensuring the continuity of the business. In fact, this approach not only enables access to specific market segments but also aids their customers in adhering to the environmental standards they must meet, thereby fostering the dissemination of progressively higher environmental performance across the entire value chain, up to reaching the final customer.

To address the need for low-carbon products to support decarbonisation efforts both internally and at the European and global levels, Feralpi Group, through the "Green Go-to-market" project, has developed a systematic strategy aligned with its transition plan [Section 15.1.1] to offer a full range of these products, collaborating with leading international partners.

This is why, over the years, the Group has implemented methodologies to assess the environmental impact of its products, so as to be able to identify the main drivers and evaluate the most appropriate mitigation measures along its supply chains. The studies were performed employing the **Life Cycle Assessment** methodology, in accordance with ISO 14040 and ISO 14044 standards and known as the "cradle to gate" framework, which examines all stages of the product life cycle from raw materials to when it exits the company site.

In this way, for each product category of Feralpi Siderurgica, Acciaierie di Calvisano, Presider and Caleotto, it was possible to obtain the Environmental Product Declaration (EPD - Environmental Product Declaration) in accordance with ISO 14025 and EN 15804 standards. In addition to the EPD, the Group has also conducted Product Carbon Footprint (CFP) studies for the products of Feralpi Siderurgica, Acciaierie di Calvisano, Presider and Caleotto, certifying them through the standard ISO 14067.

All studies were subject to verification by recognised external bodies to ensure the accuracy and reliability of the results obtained.

Both tools, EPD and CFP, provide a comprehensive assessment of environmental impact, allowing the

environmental performance of products to be transparently communicated and gaining a competitive advantage in the market. While the EPD provides a holistic view of a product's environmental performance, the CFP allows for an in-depth examination of the climate impact stemming from greenhouse gas emissions associated with the product's life cycle.

#### 15.3 Taxonomy Regulation

The European Taxonomy<sup>10</sup> is one of the initiatives promoted by the European Commission to achieve the objectives of the European Green Deal and make Europe "carbon neutral" by 2050. It consists of a classification system aimed at identifying environmentally sustainable economic activities.

Despite not being bound by the CSRD disclosure requirements, Feralpi Group has nonetheless reviewed its activities to confirm their adherence to the European Taxonomy for the 2024 financial year.

In this way, it was possible to identify eligible, ineligible, and aligned activities with the Taxonomy Regulation criteria, also verifying compliance with the Group-level minimum social protection safeguards.

The full results of this analysis, a summary of which is presented in the table below, are available in *Appendix [Section "The Taxonomy Regulation: Evaluation and KPI Tables"*].

TURNOVER	UdM	2024	2023	Δ
Taxonomy-aligned	%	0	0	_
Taxonomy-eligible	%	95.92	96.11	-0.19
Manufacture of iron and steel	%	95.91	96.10	-0.19
Power generation using photovoltaic solar technology	%	0.01	0.01	-
Taxonomy non-eligible	%	4.08	3.89	+0.19
CAPEX				
Taxonomy-aligned	%	0	0	_
Taxonomy-eligible	%	98.89	97.97	+0.92
Manufacture of iron and steel	%	97.43	93.72	+3.71
Power generation using photovoltaic solar technology	%	1.45	4.23	-2.78
Production of heat/cooling using exchange heat	%	0.02	0.02	<u>-</u>
Taxonomy non-eligible	%	1.11	2.03	-0.92
OPEX				
Taxonomy-aligned	%	0	0	
Taxonomy-eligible	%	98.24	98.01	+0.23
Manufacture of iron and steel	%	98.24	98.01	+0.23
Taxonomy non-eligible	%	1.76	1.99	-0.23

<sup>&</sup>lt;sup>10</sup> Regulation (EU) 2020/852